Attorney Docket No. JMY-P01-002

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Derry Roopenian

Examiner:

Qian J. Li

Serial No.:

09/993,322

Art Unit:

1632

Filing Date:

November 6, 2001

For:

FcRn-Based Therapeutics for the

Treatment of Auto-Immune

Disorders

# CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to the Commissioner for Patents, Washington, D.C. 20231 on September 15, 2003.

Mary Jane DiPalma

BOX AF COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

## DECLARATION BY DR. DERRY ROOPENIAN UNDER 35 §U.S.C. 1.132

Sir:

I, DERRY ROOPENIAN, hereby declares and states as follows:

1. I am the applicant and the inventor of the above-identified patent application, and the subject matter described and claimed therein.

Serial No. 09/993,322 - 2 - Art Unit: 1632

2. I am a Senior Staff Scientist at The Jackson Laboratory. A copy of my CV is enclosed with this Declaration.

- 3. I have read the above-identified patent application and the Office Action issued by the U.S. Patent and Trademark Office on May 7, 2003, in the above-identified patent application.
- 4. I understand that the Examiner has rejected all of the elected claims. In rejecting the claims, the Examiner stated that the muFcRn -/-, and the muFcRn -/-, +huFcRn transgenic mice "cannot be routinely and reproducibly made in light of the state of the art of transgenic technology". I believe that the Examiner's statement is in error. At the time of the filing of the instant application, both the mouse FcRn gene and the human FcRn gene were known. The knockout and transgenic technologies were well established and routinely practiced to produce knockout or transgenic mice. Therefore, at the time of the filing of the above-identified patent application, with the guidance provided in the instant patent application, the transgenic mice used in the claimed methods could be routinely and reproducibly made by one of ordinary skill in the art.

Declarant further states that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 9/11/03

Signad:

# **Curriculum Vitae** Derry Charles Roopenian

Phone 207-288-6396 FAX 207-288-6683 dcr@jax.org

#### Work Address:

The Jackson Laboratory 600 Main Street Bar Harbor, Maine 04609

### Home Address:

Locust Lane

Salisbury Cove, Maine 04672

### Born:

August 24, 1949; Boston, MA

### Education:

1972 1984

B.A. Zoology, University of Vermont, Burlington, VT

Ph.D. Pathobiology, University of Minnesota, Minneapolis, MN

### Professional Experience:

1980-1983

Research Assistant, University of Minnesota, Minneapolis, MN, Department of Laboratory

Medicine and Pathology Advisor: Fritz H. Bach

Research Fellow, Harvard Medical School, Boston, MA, Department of Pathology,

Advisor: Matthew F. Mescher, Ph.D.

1985

1984

Research Fellow, Dana-Farber Cancer Institute, Boston, MA, Department of Pediatric

Oncology, Advisor: Steven J. Burakoff, M.D.

1985-1990

Associate Staff Scientist, The Jackson Laboratory, Bar Harbor, ME

1990-1999

Staff Scientist, The Jackson Laboratory, Bar Harbor, ME

2000-Present Senior Staff Scientist, The Jackson Laboratory, Bar Harbor, ME

#### Awards:

1984-1985

American Cancer Society Postdoctoral Fellowship

1994-1995

Merck Scholar in Immunology

1997

Co-organizer, The First International Symposium on Minor Histocompatibility Antigens

2001-2005

Alliance for Lupus Research Investigator

2002

Co-organizer, The 2nd International Symposium on Minor Histocompatibility Antigens

### Memberships:

American Association of Immunologists

The Transplantation Society

#### **Editorial Activities:**

1989-Present Transplantation, Editorial Board

Ad Hoc, various journals

### **Review Panels:**

1991-1995

Immunology, Virology and Pathology Study Section, NIH

1995-1999

NIH Reviewers Reserve

1995-present

Ad Hoc at various NIH Study Sections

2003

Medical Research Council, United Kingdom

# Invited Speaker and Conferences (2002-Present):

University of Connecticut, Department of Pathology, January 2002.

Alliance for Lupus Research, February 2002.

Department of Molecular and Cellular Biology, University of California, Berkeley, March 2002.

Co-organizer, 2<sup>nd</sup> International Symposium on Minor Histocompatibility Antigens, 13<sup>th</sup> IHWC, Seattle, May

The Immunogenomics of Minor Histocompatibility Antigens, 2<sup>nd</sup> International Symposium on Minor Histocompatibility Antigens, 13th IHWC, Seattle, May 2002.

Faculty. The Short Course in Medical and Experimental Medical Genetics, The Jackson Laboratory, Bar Harbor, Maine, July 1993-2003.

Harvard Institutes of Medicine, Harvard Medical School, July 2002.

Alliance for Lupus Research , New York, NY, March 2003

Scheicher and Schuell, Keene NH. February 2003.

New England BioLabs, Beverly MA March 2003

Vanderbilt University School of Medicine, April 2003

### **Original Publications:**

- Roopenian DC, Click RE. 1980. A new cytotoxic lymphocyte-defined antigen coded for by a gene closely linked to the H-3 locus. Immunogenetics 10:333-341.
- Click RE, Schneider D, Roopenian DC. 1981. A new minor histocompatibility locus linked to H-3. J Immunol 126:2378-2381.
- Orosz CG, Fidelus RK, Roopenian DC, Widmer MB, Ferguson RM, Bach FH. 1982. Analysis of cloned T cell function. I. Dissection of cloned T cell proliferative responses using cyclosporin A. J Immunol 129:1865-1868.
- Hoffman RA, Widmer MB, Roopenian DC, Ascher NL, Simmons RL. 1983. Random locomotion of bulk and cloned lymphocytes during mitogenic and allogeneic stimulation in vitro. Transpl Proc 15:371-373.
- Orosz CG, Fidelus RK, Roopenian DC, Widmer MB, Ferguson RM, Bach FH. 1983. A new immunosuppressive mechanism for cyclosporin-A demonstrated with cloned T-lymphocytes. Transpl Proc 15:1927-1929.
- Orosz CG, Roopenian DC, Bach FH. 1983. Phorbol myristate acetate and in vitro lymphocyte function. I. PMA may contaminate lymphokine preparations and can interfere with interleukin bioassays. J Immunol 130:1764-1769.
- Orosz CG, Roopenian DC, Bach FH. 1983. Phorbol ester mediates reversible reduction of cloned T lymphocyte cytolysis. J Immunol 130:2499-2501.
- Orosz CG, Roopenian DC, Bach FH. 1983. Phorbol myristate acetate and in vitro T lymphocyte function. II. Influence of PMA and supernatants from PMA-treated P388D1 cells on the proliferation of cloned T cells. J Immunoi 130:2261-2265.
- Orosz CG, Roopenian DC, Widmer MB, Bach FH. 1983. Analysis of cloned T cell function. II. Differential blockade of various cloned T cell functions by cyclosporine. Transplantation 36:706-711.
- Roopenian DC, Widmer MB, Orosz CG, Bach FH. 1983. Helper cell-independent cytolytic T lymphocytes specific for a minor histocompatibility antigen. J Immunol 130:542-545.
- Roopenian DC, Widmer MB, Orosz CG, Bach FH. 1983. Response against single minor histocompatibility antigens. I. Functional and immunogenetic analysis of cloned cytolytic T cells. J Immunol 131:2135-
- Widmer MB, Roopenian DC, Bach FH. 1983. Cytolytic T lymphocyte clones with helper-cell characteristics. Transpl Proc 15:393-395.
- Orosz CG, Roopenian DC. 1984. Influence of PMA on T-lymphocyte responses to mitogenic lymphokines. Lymphokine Res 3:23-30.
- Roopenian DC. 1984. Studies of immune responses against minor histocompatibility antigens. Ph.D. Thesis, University of Minnesota.
- Roopenian DC, Orosz CG, Bach FH. 1984. Responses against single minor histocompatibility antigens. II. Analysis of cloned helper T cells. J Immunol 132:1080-1084.
- Biel LW, Roopenian DC, Widmer MB, Bach FH. 1985. Induction of immune skin lesions by T-lymphocyte clones of particular subclasses. Transpl Proc 17:610-611.
- Orosz CG, Roopenian DC. 1985. Phorbol myristate acetate and in vitro T lymphocyte function. III. Selective impairment by PMA of lethal hit delivery by cloned CTL. Transplantation 39(4):411-418.
- Sidman CL, Luther EA, Marshall JD, Nguyen KA, Roopenian DC, Worthen SM. 1987. Increased expression of major histocompatibility complex antigens on lymphocytes from aged mice. Proc Natl Acad Sci USA 84(21):7624-7628.
- Roopenian DC, Anderson PS. 1988. Generation of helper cell-independent cytotoxic T lymphocytes is dependent upon L3T4+ helper T cells . J Immunol 141(2):391-397
- Roopenian DC, Anderson PS. 1988. Adoptive immunity in immune-deficient scid/scid mice. I. Differential requirements of naive and primed lymphocytes for CD4+ T cells during rejection of minor histocompatibility antigen-disparate skin grafts. Transplantation 46(6):899-904.
- Roopenian DC, Davis AP. 1989. Responses against antigens encoded by the H-3 histocompatibility locus: Antigens stimulating class I MHC- and class II MHC-restricted T cells are encoded by separate genes. Immunogenetics 30(5):335-343.

Roopenian CV

- Davis AP, Roopenian DC. 1990. Complexity at the mouse minor histocompatibility locus H-4. Immunogenetics 31(1):7-12.
- Graff RJ, Kurtz ME, Paul R, Martin D, Roopenian DC. 1991. Additional mapping of mouse chromosome 2 genes. Immunogenetics 33(2):96-100.
- Roopenian DC, Christianson GJ, Davis AP, Zuberi AR, Mobraaten LE. 1993. The genetic origin of minor histocompatibility antigens. Immunogenetics 38(2):131-140.
- Roopenian DC, Davis AP, Christianson GJ, Mobraaten LE. 1993. The functional basis of minor histocompatibility loci. J Immunol 151(9):4595-4605.
- Zuberi AR, Roopenian DC. 1993. High-resolution mapping of a minor histocompatibility antigen gene on mouse chromosome 2. Mamm Genome 4(9):516-522.
- van der Heyde HC, Elloso MM, Roopenian DC, Manning DD, Weidanz WP. 1993. Expansion of the CD4-, CD8- gamma delta T cell subset in the spleens of mice during non-lethal blood-stage malaria. Eur J Immunol 23(8):1846-1850.
- van der Heyde HC, Manning DD, Roopenian DC, Weidanz WP. 1993. Resolution of blood-stage malarial infections in CD8+ cell-deficient beta 2-m0/0 mice. J Immunol 151(6):3187-3191.
- Baker PJ, Evans RT, Roopenian DC. 1994. Oral infection with Porphyromonas gingivalis and induced alveolar bone loss in immunocompetent and severe combined immunodeficient mice. Arch Oral Biol 39(12):1035-1040.
- King TR, Christianson GJ, Mitchell MJ, Bishop CE, Scott D, Ehrmann I, Simpson E, Eicher EM, Roopenian DC. 1994. Deletion mapping by immunoselection against the H-Y histocompatibility antigen further resolves the Sxra region of the mouse Y chromosome and reveals complexity of the Hya locus. Genomics 24(1):159-168.
- Schumacher TN, Kantesaria DV, Serreze DV, Roopenian DC, Ploegh HL. 1994. Transporters from H-2b, H-2d, H-2s, H-2k, and H-2g7 (NOD/Lt) haplotype translocate similar sets of peptides. Proc Natl Acad Sci USA 91(26):13004-13008.
- Serreze DV, Leiter EH, Christianson GJ, Greiner D, Roopenian DC. 1994. Major histocompatibility complex class I-deficient NOD-B2mnull mice are diabetes and insulitis resistant. Diabetes 43(3):505-509.
- Zuberi AR, Dudley ME, Christianson GJ, Roopenian DC. 1994. Gene mapping in a murine cell line by immunoselection with cytotoxic T lymphocytes. Genomics 19(2):273-279.
- Buhlmann JE, Foy TM, Aruffo A, Crassi KM, Ledbetter JA, Green WR, Xu JC, Shultz LD, Roopenian DC, Flavell RA, Noelle RJ. 1995. In the absence of a CD40 signal, B cells are tolerogenic. Immunity 2(6):645-653.
- Dudley ME, Sundberg JP, Roopenian DC. 1995. Motif-primed polymerase chain reaction-based allelotype of sarcomas induced by 3-methylcholanthrene in interspecific hybrid mice. Oncogene 11(3):517-524.
- Blazar BR, Roopenian DC, Taylor BA, Christianson GJ, Panoskolis-Molinari A, Vallera DA. 1996. Lack of GVHD across classical minor histocompatibility locus barriers. Transplantation 61:619-624.
- Cariappa A, Flyer DC, Rollins CT, Roopenian DC, Flavell RA, Brown D, Waneck GL. 1996. Glycosylphosphatidylinositol-anchored H-2Db molecules are defective in antigen processing and presentation to cytotoxic T lymphocytes. Eur J Immunol 26:2215-2224.
- Christianson GJ, Blankenberg RL, Duffy TM, Panka D, Marshak-Rothstein AM, Roths JB, Roopenian DC. 1996. MHC class I dependence of lupus-like autoimmune syndrome of MRL-lpr mice. J Immunol 156:4932-4939.
- Dudley ME, Roopenian DC. 1996. Loss of unique antigen by CTL-immunoselection of a 3methylcholanthrene-induced sarcoma reveals secondary and shared antigens. J Exp Med 184:441-447.
- Dudley ME, Sundberg JP, Roopenian DC. 1996. Adenoma formation in ApcMin mice unaffected by severe combined immunodeficiency (SCID) mutation. Int J Cancer 65:249-253.
- Mukherjee R, Yin Z-Q, Zhang Z, Zhong R, Roopenian DC, Jevnikar AM. 1996. Lupus nephritis in the absence of renal MHC class I and class II molecules. J Am Soc Nephrol 7:2445-2452.
- Serreze DV, Gallichin S, Snider DP, Croituru K, Rosenthal KL, Leiter EH, Christianson GJ, Dudley ME, Roopenian DC. 1996. MHC class I mediated antigen presentation and induction of CD8+ cytotoxic T lymphocyte responses in autoimmune diabetes prone NOD mice. Diabetes 45:902-908.
- Zuberi AR, Christianson GJ, Roopenian DC. 1996. Allele sizes at chromosome 2 Mit loci from 129/J, 129/Ola, C57BL/10J, and the autoimmune-prone mouse strains BXSB/MpJ-Yaa, MRL/MpJ, SLJ/J and NZB/B1nJ. Mouse Genome 94:152-154.
- Zuberi AR, Nguyen HQ, Taylor BA, Roopenian DC. 1996. A high resolution genetic linkage map of mouse chromosome 2 extending from thrombospondin to paired box gene 1 including the H3 mouse minor histocompatibility complex. Genomics 33(1):75-84.
- von der Weid T, Beebe A, Roopenian DC, Coffman RL. 1996. Early protection of IL-4 and induction of Th2 responses in the lymph nodes originate from a MHC class-I independent CD4+NK1.1- T cell population. J Immunol 1567:4421-4427.

- Christianson GJ, Brooks W, Vekasi S, Manolfi EA, Rothlein R, Roopenian DC. 1997. ©2 microglobulindeficient mice are protected from hypergammaglobulinemia and have defective T antibody responses because of increased IgG catabolism. J Immunol 159:4781-4792.
- Christianson SW, Greiner DL, Hesselton R-A, Leif JH, Wagner EJ, Schweitzer IB, Rajan TV, Gott B, Roopenian DC, Shultz LD. 1997. Enhanced human CD4+ cell engraftment in D2-microglobulindeficient NON-scid mice. J Immunol 158:3578-3586.
- Ghiasi H, Roopenian DC, Slanina S, Cai S, Nesburn AB, Wechsler SL. 1997. The role of MHC-I and MHC-Il in protection of naive and vaccinated mice following lethal HSV-1 challenge. Immunology 91:430-435.
- Liu Z, Roopenian DC, Zhou X, Diaz LA, Anderson CL. 1997. □2 Microglobulin-deficient mice are resistant to bullous pemphigoid. J Exp Med 186:777-783.
- Mendoza LM, Paz P, Zuberi AR, Christianson GJ, Roopenian D, Shastri N. 1997. Minors held by majors: the H13 minor histocompatibility locus defined as a peptide/MHC class I complex. Immunity 7:461-472.
- Bilinski P, Roopenian DC, Gossler A. 1998. Maternal IL-11R f23 a function is required for normal deciduation and placentation in mice. Genes Dev 12:2234-2243.
- Boesteanu A, Brehm M, Mylin LM, Christianson GJ, Tevethia S, Roopenian D, Joyce S. 1998. A molecular basis for how a single TCR interfaces multiple ligands. J Immunol 161:4719-4727.
- DiLorenzo TP, Graser RT, Ono T, Christianson GJ, Chapman HD, Roopenian DC, Nathenson SG, Serreze DV. 1998. MHC class I-restricted T cells are required for all but the end stages of diabetes development in NOD mice and utilize a prevalent T cell receptor alpha chain gene rearrangement . Proc Natl Acad Sci USA 95:12538-12543.
- Malarkannan S, Shih P, Eden P, Zuberi AR, Christianson GJ, Roopenian DC, Shastri N. 1998. The molecular and functional characterization of a dominant minor H antigen, H60. J Immunol 161(7):3501-
- Sirak JH, Orosz CG, Roopenian DC, Wakely E, VanBuskirk AM. 1998. Cardiac allograft tolerance: Failure to develop in IL-4 deficient mice correlates with differential loss of self-MHC-restricted cell-mediated immunity. Transplantation 65:1352-1356.
- Strausbach MA, Nevela WK, Roopenian DC, Stefanski HE, Wettstein PJ. 1998. Identification of mimotopes for the H4 minor histocompatibility antigen. Int Immunol 10:421-434.
- Zuberi AR, Christianson GJ, Dave SB, Bradley JA, Roopenian DC. 1998. Expression screening of a yeast artificial chromosome contig refines the location of the mouse H3a minor histocompatibility antigen gene. J Immunol. 161: 821-8.
- Zuberi AR, Christianson GJ, Mendoza LM, Shastri N, Roopenian DC. 1998. Positional cloning and molecular characterization of an immunodominant cytotoxic determinant of the mouse H3 minor histocompatibility complex. Immunity 9:687-698.
- Baker PJ, Carter S, Dixon M, Evans RT, Roopenian DC. 1999. Serum antibody response to oral infection precedes but does not prevent porphyromonas gingivalis-induced alveolar bone loss in mice. Oral Microbiol Immunol 14:194-196.
- Baker PJ, Dixon M, Evans RT, Dufour L, Johnson E, Roopenian DC. 1999. CD4+ T Cells and the proinflammatory cytokines gamma interferon and interleukin-6 contribute to alveolar bone loss in mice. Infect Immun 67(6):2804-2809.
- Eden PA, Christianson, GJ, Fontaine P, Wettstein PJ, Perreault C, Roopenian, DC. 1999. Biochemical and immunogenetic analysis of an immunodominant peptide (B6dom1) encoded by the classical H7 minor histocompatibility locus. J Immunol 162:4502-4510.
- Ideda A, Zheng QY, Rosentiel P, Maddatu T, Zuberi AR, Roopenian DC, North MA, Naggert JK, Johnson KR, Nishina PM. 1999. Genetic modification of hearing in tubby mice: evidence for the existence of a major gene (moth1) which protects tubby mice from hearing loss. Hum Molec Genet 8(9):1761-1767.
- Klinge H, Roopenian DC. 1999. The same genetic regions encode minor histocompatibility antigens detected in the context of different MHC haplotypes. Transplantation 67(8):1178-1183.
- Pion S, Christianson GJ, Fontaine P, Roopenian DC, Perreault C. 1999. Shaping the repertoire of cytotoxic T lymphocyte responses: Explanation for the immunodominance effect whereby cytotoxic T lymphotyctes specific for immunodominant antigens prevent recognition of short nondominant antigens. Blood 93(3):952-962.
- Schoor M, Schuster-Gossler K, Roopenian D, Gossler A. 1999. Skeletal dysplasias, growth retardation, reduced postnatal survival, and impaired fertility in mice lacking the SNF2/SWI2 family member ETL1. Mech Dev 85:73-83.
- Baker PJ, Dixon M, Roopenian DC. 2000. Genetic control of susceptibility to Porphyromonas gingivalisinduced alveolar bone loss in mice. Infect Immun 68(10):5864-5868.
- Baker PJ, DuFour L, Dixon M, Roopenian DC. 2000. Adhesion molecule deficiencies increase Porphyromonas gingivalis-induced alveolar bone loss in mice. Infect Immun 68(6):3103-3107.

Roopenian CV

Graser RT, DiLorenzo TP, Wang F, Christianson GJ, Chapman HD, Roopenian DC, Nathenson SG, Serreze DV. 2000. Identification of a CD8 T cell that can independently mediate autoimmune diabetes development in the complete absence of CD4 T cell helper functions. J Immunol 164:3913-3918.

Kingsbury DJ, Mear JP, Witte DP, Taurog JD, Roopenian DC, Colbert RA. 2000. Development of spontaneous arthritis in b2-microglobulin-deficient mice without expression of HLA-B27. Arthritis Rheum 43(10):2290-2296.

Malarkannan S, Horng T, Eden P, Gonzalez F, Shih P, Brouwenstijn N, Christianson G, Klinge H, Roopenian D, Shastri N. 2000. Differences that matter: Major cytotoxic T cell stimulating minor histocompatibility antigens. Immunity 13(3):333-344.

Choi EY, Yoshimura Y, Christianson GJ, Sproule TJ, Malarkannan S, Shastri N, Joyce S, Roopenian DC. 2001. Quantitative analysis of the immune response to mouse non-MHC transplantation antigens in vivo: the H60 histocompatibility antigen dominates over all others. J Immunol 166:4370-4379.

Fleming RE, Holden CC, Tomatsu S, Waheed A, Brunt EM, Britton RS, Waheed A, Bacon BR, Roopenian DC, Sly WS. 2001. Mouse strain differences determine severity of iron accumulation in Hfe knockout model of hereditary hemochromatosis. Proc Natl Acad Sci USA 98(5):2707-2711.

Mendoza LM, Villaflor G, Eden P, Roopenian D, Shastri N. 2001. Distinguishing self from nonself: immunogenicity of the murine H47 locus is determined by a single amino acid substitution in an unusual peptide. J Immunol 166:4438-4445.

Sproule TJ, Jazwinska EC, Britton RS, Bacon BR, Sly WS, Roopenian DC. 2001. Naturally variant autosomal and sex-linked loci determine the severity of iron overload in B2-microglobulin-deficient mice. Proc Natl Acad Sci USA 98:5170-5174.

Shreeram Akilesh, Mark E. Dudley, Peter A. Eden, Derry C. Roopenian. 2001. Efficient Chromosomal Mapping of a Methylcholanthrene-induced Tumor Antigen by CTL Immunoselection. J Immunol. 2001 167:5143-9.

Ostrov DA, Roden MM, Shi W, Palmieri E, Christianson GJ, Mendoza L, Villaflor G, Tilley D, Shastri N, Grey H, Almo SC, Roopenian D, Nathenson SG. 2002. How H13 histocompatibility peptides differing by a single methyl group and lacking conventional MHC binding anchor motifs determine self-nonself discrimination. J Immunol. 2002 168: 283-9.

Baker PJ, Garneau J, Howe L, Roopenian DC. T-cell contributions to alveolar bone loss in response to oral infection with Porphyromonas gingivalis. Acta Odontol Scand. 2001 59:222-5.

Cerwenka A, O'Callaghan CA, Hamerman, JA, Yadav R, Ajayi W, Roopenian DC, Joyce S, and Lanier LL. The minor histocompatibility antigen H60 peptide interacts with both H-2Kb and NKG2D. 2002. J. Immunol. Cutting Edge 168: 3131-4.

Choi EY, Christianson GJ, Yoshimura Y, Jung N, Sproule TJ, Subramaniam Malarkannan S, Joyce S, and Roopenian DC. 2002. Real-time T cell profiling identifies H60 as a major minor histocompatibility antigen in murine graft vs host disease. Blood (Plenary Article) 100:4259-65.

Choi EY, Christianson GJ, Sproule TS, Yoshimura Y, Jung N, Joyce S, Roopenian DC. 2002. Immunodominance of H60 is caused by an abnormally high precursor T cell pool. Immunity 17:593-

Chadhury C, Mehanz S, Robinson JM, Hayton WL, Pearl DK, Roopenian DC, Anderson CL. 2003. The MHC-related Fc Receptor (FcRn) binds albumin and prolongs its lifespan. J Exp Med 197:315-322.

Roopenian DC, Christianson, GJ, Sproule TJ, Brown AC, Akilesh S, Jung N, Petkova S, Avanessyan L, Choi, EY, Shaffer DJ, Eden PA, Anderson CL. 2003. The MHC class I-like IgG receptor (FcRn) controls perinatal IgG transport, IgG homostasis and the fate of IgG-Fc coupled drugs. J Immunol 170:3528-3533.

Yadav R, Yoshimura Y, Boesteanu A, Christianson GJ, Ajayi WU, Shashidharamurthy R, Stanic AK, Roopenian DC, Joyce S. 2003. The H4(b) minor histocompatibility antigen is caused by a combination of genetically determined and posttranslational modifications. J Immunol. 170:5133-42.

Haskova Z, Sproule TJ, Roopenian DC, Ksander AB. 2003. An immunodominant minor histocompatibility alloantigen that initiates corneal allograft rejection. Transplantation 75:1368-74

Akilesh S, Shaffer DJ, Roopenian DC. 2003. Customized molecular phenotyping by quantitative gene expression and pattern recognition analysis. Genome Res 13:1719-1727.

Luedtke B, Pooler LM, Choi EY, Tranchita AM, Reinbold C, Brown AC, , Shaffer DJ, Roopenian DC, Malarkannan S. A single nucleotide polymorphism in the Emp3 gene differentially affects the quantity of allelic epitopes that define the H4 minor histocompatibility antigen. Immunogenetics Epub ahead of print Jul 4 2003.

Brown AC, Kai K, May ME, Brown DC, Roopenian DC. 2003. ExQuest, A novel method for deciphering and displaying quantitative gene expression from ESTs. Genomics. (submitted).

Stanic AK, , Shashidharamurthy R, Bezbradica JS, Matsuki N, Yoshimura Y, Miyake S, Choi EY, Schell TD, Van Kaer L, Tevethia ST, Roopenian DC, Yamamura T. Another view of T cell antigen

Roopenian CV

- recognition: Co-operative engagement of glycolipid antigens by Va14Ja18 natural T cell receptor. J Immunol (in press).
- Akilesh S, Sproule TJ, Petkova S, Shaffer DJ, Roopenian DC. The MHC class I-like Fc Receptor (FcRn) is a critical link between the initiation and effector phases of humorally-mediated autoimmune disease. (submitted).
- Rajwardhan Y, Yoshitaka Y, Christianson GJ, Ajayi WU, Shashidharamurthy R, Roopenian DC, Joyce S. Causes of immunodominant minor histocompatibility antigen-specific CTL responses, (submitted).
- Yoshida M, Claypool SM, Mizoguchi E, Mizoguchi A, Roopenian DC, Lencer W, Blumberg RS. The neonatal Fc receptor transport dependent transcytosis of IgG and IgG/antigen complexes across mucosal epithelial barriers. (submitted).
- Zhang JQ, Okumura C, McCarty T, Shin MS, Lee CH, Hori M, Naghashfar Z, Roopenian D, Morse HC, Davidson WF. Evidence for selective transformation of autoreactive immature plasma cells in mice deficient in Fasl (submitted).

### Books, Book Chapters and Reviews

- Bach FH, Alter BJ, Roopenian DC, Widmer MB. 1982. T lymphocyte responses to major histocompatibility complex encoded antigens. Proceedings 14th Course on Transplantation and Clinical Immunology, Lyon.
- Bach FH, Wee SL, Roopenian DC, Chen LK, Orosz CG, Widmer MB. 1982. Helper cellindependentcytotoxic T lymphocytes (HITc) in mouse and man. In: Intercellular Communication in Leucocyte Function, Parker JW, O'Brien RL (eds), Proceedings of 15th International Leucocyte Culture Conference, Chichester, John Wiley & Sons, Ltd, pp. 109-116.
- Bach FH, Roopenian DC, Wee SL, Isakov BL, Widmer MB. 1983. T cell responses to MHC and non-MHC antigens: Re-examining the LD-SD concept. In: Proceedings 5th International Congress on Immunology, Tada T (ed). Kyoto, Japan, Academic Press.
- Widmer MB, Roopenian DC, Biel LW, Bach FH. 1985. Characterization of alloreactive murine T cell clones in vitro. In: T Cell Clones, von Boehmer H, Haas W (eds). Research Monographs in Immunology, Vol. 8 Elsevier, New York, pp. 131-138.
- Widmer MB, Roopenian DC, Biel LW, Bach FH. 1985. Characterization of alloreactive murine T cell clones in vivo. In: T Cell Clones, von Boehmer H, Haas W (eds), Research Monographs in Immunology, Vol. 8 Elsevier, New York, pp. 201-208.
- Roopenian DC, Davis AP. 1990. Products of separate genes within minor histocompatibility loci stimulate class I and class II MHC-restricted T cells. In: Transgenic Mice and Mutants in MHC Research, Egorov I, David C (eds), Springer-Verlag, Heidelberg 58-60.
- Roopenian DC. 1992. What are minor histocompatibility loci? A new look at an old question. Immunol Today 13(1):7-10.
- Roopenian DC. 1997. Minor histocompatibility loci congenic strains. In: Handbook of Experimental Immunology, Vol. 4. Blackwell Scientific Publications, Boston, 152.1-152.5.
- Simpson E, Roopenian DC. 1998. Minor histocompatibility antigens. Curr Opin Immunol 9:655-661.
- Simpson E, Roopenian DC, Goulmy E. 1998. Much ado about minor histocompatibility antigens. Immunol Today 19:108-112.
- Mendoza LM, Paz P, Zuberi AR, Christianson GJ, Roopenian D, Shastri N. 2000. Identifying T cell-defined histocompatibility antigens by expression cloning. In: Minor Histocompatibility Antigens: From the Laboratory to the Clinic, Roopenian DC, Simpson E, (eds). Landes Bioscience, Georgetown, TX. 37-45.
- Roopenian DC. 2000. Lessons from H3, a model autosomal mouse minor histocompatibility locus. In: Minor Histocompatibility Antigens: From the Laboratory to the Clinic, Roopenian DC, Simpson E (eds), Landes Bioscience, Georgetown, TX 1-14.
- Roopenian DC, Simpson E. 2000. Minor Histocompatibility Antigens: From the Laboratory to the Clinic, Roopenian DC, Simpson E, (eds), Landes Bioscience, Georgetown, TX.
- Haskova Z, Arancibia-Carcamo CV, Christianson GJ, Roopenian DC, Ksander BR. 2000. Defective antigen processing and presentation by MHC Class molecules on ocular tissue. In: Uveitis in the Third Millennium, First Edition, Dodds EM, Couto CA (eds), Elsevier, Amsterdam, The Netherlands 7-
- Baker, P.J. Roopenian, D.C. 2002. Genetic susceptibility to chronic periodontal disease. Microbes and Infection. Microbes Infect. 2002 4:1157-67.
- Roopenian DC. 2002. The immunogenomics of minor histocompatibility antigens. Immunol Rev 190:86-94.
- Serreze DV, Roopenian DC. 2003. Was there type 1 diabetes in the Olduvai Gorge? In: Immunology of type 1 diabetes. Eisenbarth G (ed), Landes Bioscience, Austin, TX. (in press).